

Closure Planning Services for Mining Projects



Areas of Expertise

Air

- Air quality monitoring, modeling, and permitting
- Landfill gas, materials management

Demolition/Construction

- Salvage/asset recovery
- Dismantling
- Construction management

Water

- Acid rock drainage/leaching analyses
- Hydraulic/Hydrologic modeling
- Water/sediment management
- Wetland/habitat restoration

Waste

- Investigation/remediation/closure plan
- Emergency/rapid response
- Feasibility studies/design
- Geotechnical Characterization
- Hazardous materials management/decontamination
- Landfill construction
- Radiological surveys

Environmental Services

- Health/ecological risk assessments
- Archaeology/cultural/socioeconomic resources
- Stakeholder/team communications
- Environmental Impact Statements and Permitting

Health and Safety Services

Project Management

- Cost estimating/modeling
- Construction/demolition management/O&M

Overview

Mining, processing and support facilities associated with mineral resource development have a significant long-term impact on the environmental and social aspects of a project. Site disturbance, even in the early stages of a project, creates legal and financial obligations for the project developer.

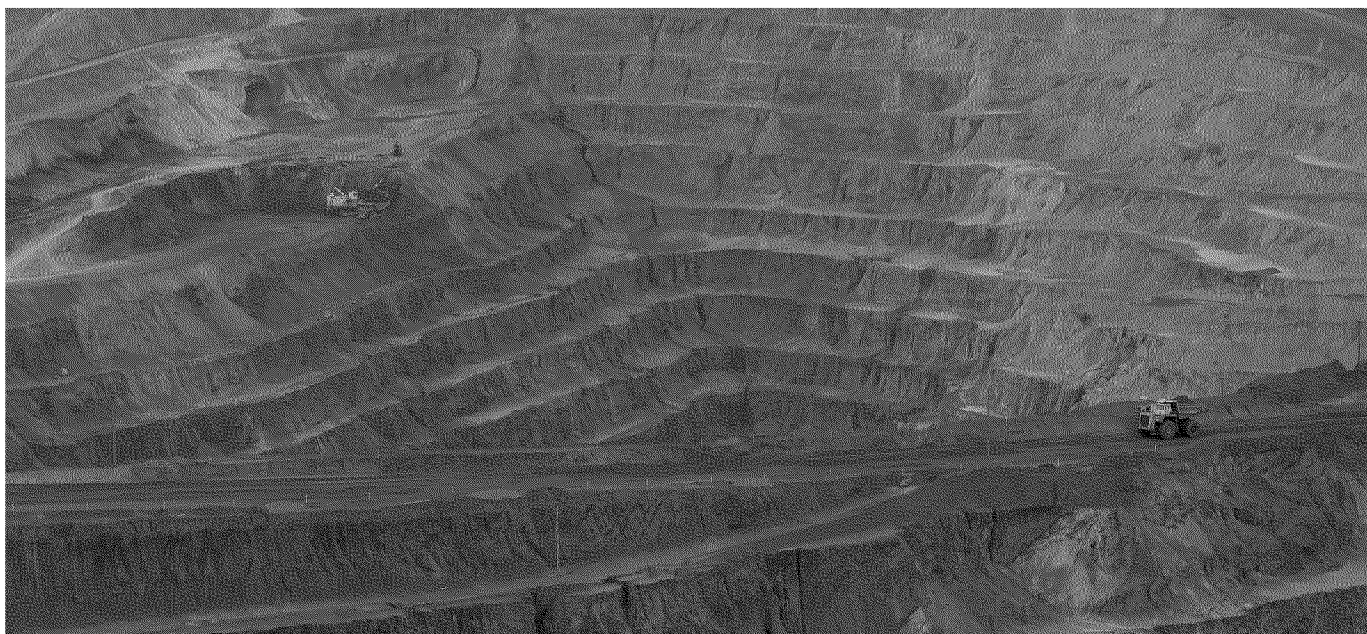
Due to the finite nature of mineral deposits, all mines and related facilities will eventually close. Communities, governments, and lending institutions are increasingly aware of the benefit of good closure planning.

Our Approach

For over 90 years, AECOM has been providing a full range of demolition, planning, geological, engineering, environmental, health and safety, and related services for the mining industry and government. Closure plans and cost estimates are used to manage long-term impact to the environment and community and to set financial assurance for closure liabilities. We focus closure plans and cost estimates on acceptable end land use and limiting long-term liabilities. This can be of benefit at any stage in the mining life cycle. AECOM has successfully performed over 120,000 major projects, removing over 90,000 structures to prepare project sites for future reuse or remediation.

AECOM plans, implement, and audits closure plans and closure cost estimates for:

- Mineral exploration sites
- Greenfield sites where existing disturbance is minimal or non-existent
- Brownfield sites where mines and processing facilities are expanding or restarting on previously disturbed areas
- Existing mines where closure plans have not been developed or existing closure plans require updating
- Care and maintenance plans for sudden or unplanned mine closures
- Abandoned mine and mineral processing sites where historical impacts are unknown and/or difficult to manage



Differentiators

Commitment to Health and Safety. AECOM is committed to providing our employees with a safe and healthy work environment and minimizing the liability concerns that our clients have regarding the safety performance of their contractors. To achieve these goals, AECOM has developed and actively implements a comprehensive global Health & Safety Program that protects employees, complies with all pertinent governmental regulations, and satisfies our clients' health and safety requirements.

Mine Closure Planning. AECOM understands that planning for a successful mine facility closure can be a complex, multidisciplinary task. However, it is essential to minimize long-term risk for the environment, the mining company, government, and affected stakeholders. AECOM works with our clients to develop closure plans that minimize costs for mining companies, government, and the public, yet maximize environmental sustainability.

We have a strong safety focus, proactively managing the risks associated with our work and striving for continuous improvement to safety performance

Mine Closure Cost Estimates. AECOM has the tools and experience to develop accurate cost estimates for the activities associated with closure including:

- Remediation of contaminated sites
- Decommissioning and demolition of infrastructure
- Geotechnical stability of waste dumps and tailings impoundments
- Management of water and acid rock drainage
- Reclamation, restoration, and revegetation of impacted lands to support end land use

Our team develops accurate and reliable cost estimates for suspension, closure, and post-closure using a wide variety of estimating tools and databases — including RACER software developed by AECOM — based on regulatory requirements and clients' business decision-making needs.

FOR MORE INFORMATION, contact us at AskMining@aecom.com. You may also refer to our website at www.aecom.com.